Remarks

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks.

Formal Request For Interview

Upon reviewing this response, if any issues remain, the Examiner is formally requested to contact the undersigned prior to issuance of the next Advisory or Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Response so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused. This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

Patentability Over Chawla

The Patent Office ("Office") asserted an action ("Action") rejecting claims 25-30 and 32, as anticipated by Chawla, U.S. Patent No. 6,023,731 ("Chawla"). Applicants respectfully traverse.

Claim 25

Applicants have amended claim 25 to provide that "wherein the proxy server comprises a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration and includes a protocol translation component that translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible video-on-demand applications into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications." See e.g., the Specification at page 4, lines 17-20, and page 6, lines 1-2.

The Office asserts that the following passages describe the recited language:

The CM 3008 is the means by which users of the media server move content between media servers or between media

servers and a user's machine. The CM 3008 stores encoded bit streams so that they are available to the MSM 3004. The CM 3008 also enables the backing up and restoring of the MFS 3010, in which video files are stored. Both the MSM 3004 and the CM 3008 provide platform-independent RPC specifications 3012 and both offer client libraries based on those lower-level specifications.

FIG. 4 illustrates the MSMC API's 202 place in the server architecture. The MSM 204 is a layer of application server software that allows the user to control and manipulate video streams using the MSMC API 202. For example, it implements the functionality that enables fast forward, rewind, and other operations on video streams. The MSM 204 is layered directly on top of the MFS 206.

Chawla, col. 4, lines 47-59.

Applicants respectfully assert that the above language fails to teach or suggest "wherein the proxy server comprises a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration and includes a protocol translation component that translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible video-on-demand applications into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications."

In Chawla, the "MSM 204 is a layer of application server software that allows the user to control and manipulate video streams using the MSMC API 202" (col. 4, line 54-56). Thus, the MSMC API is an API used to control and manipulate video streams. There simply is no "proxy server comprising a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration." Rather, Chawla teaches away from the recited arrangement because it describes an API.

An application programming interface (API) is an interface that a computer system, library or application provides in order to allow requests for service to be made of it by other computer programs, and/or to allow data to be exchanged between them.

www.wikipedia.com, April 29, 2006.

Thus, Chawla describes an interface that is followed by a client to request service. For example, in Figure 4 of Chawla, the "Media Stream Manger Client" is using the "MSMC API

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202" to make requests of the "Media Stream Manager 202," and because the requests are formed by the client according to the API, no translation is necessary. Further, in Figure 5 of Chawla, the "Content Manager: is using a "Content Manager Client API" to make requests of the Content Manager 306," and because the requests are formed by the client according to the API, no translation is necessary or described in Chawla.

Chawla teaches away from "translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not the first video-on-demand application." There is simply no translation; rather there is a defined interface. Further, the described arrangement in Chawla teaches away from a "proxy server comprising a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration."

In another example, Chawla at col. 4, line 49 states that both "the MSM 3004 and the CM 3008 provide platform-independent RPC specifications 3012 and both offer client libraries based on those lower-level specifications." This language also teaches away from the recited arrangement.

Remote procedure call (RPC) is a protocol that allows a computer program running on one computer to cause a subroutine on another computer to be executed without the programmer explicitly coding the details for this interaction. When the software in question is written using object-oriented principles, RPC may be referred to as remote invocation or remote method invocation.

www.wikipedia.com, April 29, 2006.

Chawla describes an RPC protocol that a client and server use to request and receive service. For example, in Figure 3 of Chawla, a client uses the "RPC specification" to form requests for the server, and because the requests are formed by the client according to the RPC specification, no translation is necessary or described in Chawla. Thus, Chawla teaches away from a "proxy server comprising a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration ... translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application but not the first video-on-demand application." No translation is described. Further, the described

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arrangement teaches away from a "proxy server [that] is a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration."

Next, Chawla fails to describe "translating control data" of a "first video-on-demand application ... not compatible with the second video-on-demand application." The Office asserts that this feature is described in the following passage:

FIG. 3 illustrates the two different sets of programmatic interfaces of the software of one embodiment of the media server of the present invention. The two programmatic interfaces include one interface 3002 for the MSM 3004 and one interface 3006 for the CM 3008. The MSM 3004 is the means by which users of the media server play titles on the server. The MSM 3004 supports video cassette recorder-like abstractions, for example "play a title", "fast-forward a title", and "play title X at <time specification>". The CM 3008 is the means by which users of the media server move content between media servers or between media servers and a user's machine.

Chawla, col. 4, lines 35-.

Applicants respectfully assert that the above passage fails to teach or suggest "translating control data" of a "first video-on-demand application ... not compatible with the second video-on-demand application." The API of the MSM receives calls formed according to the MSM API and no translation is necessary. Further, the API of the CM receives calls formed according to the CM API and no translation is necessary. Further, the MSM calls are not translated into CM calls, and CM calls are not translated into MSM calls. Thus, despite the discussion of two APIs there is simply no translation described there between.

There is simply no discussion in Chawla that would lead one of ordinary skill in the art to a "proxy server comprising a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration and the proxy server comprises a protocol translation component that translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application." In Chawla, at Figures 3 and 4, the client (e.g., 3002, 3006) is communicating with the server (3004, 3008) according to a defined interface or RPC. As is known to one of ordinary skill in the arts, when communicating according to a defined interface or RPC, no translation is

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necessary. As such there is no discussion of a "proxy server [that] is a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration.

For at least this reason claim 25 is allowable. Such action is respectfully requested.

Claims 26 and 27

Claims 26 and 27 depend from claim 25. Since they depend from claim 25, they should be allowed for at least the reasons stated for claim 25. In view of the foregoing discussion of claim 25, the merits of the separate patentability of dependent claims 26 and 27 are not belabored at this time. Claims 26 and 27 should be allowable. Such action is respectfully requested.

Independent Claims 28 and 32

Applicants respectfully submit that Chawla fails to teach or suggest the following features:

Claim 28 — "the method is performed by a proxy server comprising a computer interposed between the client and the head-end wherein the proxy server translates to and from control data of the first video-on-demand application and control data of the second video-on-demand application thereby facilitating video-on-demand control between two or more components communicating according to two or more non-compatible video-on-demand applications."

Claim 32 – "the proxy server comprises a computer interposed between first and second clients and the head-end in a multi-tier configuration and wherein the proxy server translates between control data compatible with the first on-demand video application but not compatible with the second on-demand video application and control data compatible with the second on-demand video application but not compatible with the first on-demand video application, the translation facilitating integration of components communicating according to two or more non-compatible on-demand video applications."

Applicants respectfully assert that Chawla fails to teach or suggest "translating control data" of a "first video-on-demand application ... not compatible with the second video-on-demand application." For example, the API of the MSM receives calls formed according to the MSM API, and no translation is necessary. Further, the API of the CM receives calls formed according to the CM API, and no translation is necessary. The MSM calls are not translated into CM calls, and CM calls are not translated into MSM calls. Thus, despite the discussion of two

APIs (the MSM and CM APIs), there is simply no translation at either API, nor any translation there between.

Since Chawla fails to teach or suggest these features of independent claims 28 and 32 they should be allowable.

Dependent Claims 29 and 30

Claims 29 and 30 depend from the above allowable independent claim 28. Since claims 29 and 30 depend from the above allowable independent claims, they should be allowed for at least this reason. Such action is respectfully requested.

Patentability over Chawla, Davis, Gupta, and Inoue

The Office has asserted a rejection of claims 1-4 as obvious over Chawla in view of Davis, U.S. Patent No. 5,898,387 ("Davis") and Gupta, U.S. Patent No. 5,799.017 ("Gupta"). The Office has asserted a rejection of claim 17 as obvious over Chawla in view of Davis. The Office has asserted a rejection of claim 18 as obvious over Chawla in view of Gupta and Inoue, U.S. Patent No. 5,729,280 ("Inoue"). The Office has asserted a rejection of claim 31 as obvious over Chawla in view of Gupta. The Office has asserted a rejection of claims 33 and 34 as obvious over Chawla. Applicants respectfully traverse.

Claim 1

Applicants have amended claim 1 to more clearly indicate that there is "a proxy comprising a computer interposed between the server and the client in a multi-tier configuration, the proxy including means for translating between the different and non-compatible first and second video-on-demand application control protocols, wherein translating comprises translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application." See e.g., the Specification at page 4, lines 17-20, and page 6, lines 1-2.

Chawla fails to teach or suggest the recited arrangement. Rather, in Chawla, at Figures 3 and 4, the client (e.g., 3002, 3006) is communicating with the server (3004, 3008) according to a defined interface or RPC. As is known to one of ordinary skill in the arts, when communicating according to a defined API (Figure 4) or RPC (Figure 3), no translation is necessary. As such there is no discussion of a "proxy server [that] is a computer interposed between the head end

and the plural video-on-demand clients in a multi-tier configuration", and there is no discussion of such a proxy server in a multi-tiered configuration "translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application."

Next, as discussed in Applicants previous response, Davis describes a translation between transport level data packets, but translating incompatible application data is not discussed.

Finally, as discussed in Applicants previous response, Gupta is a backbone for carrying data to and from devices according to an SMN message format, traveling through a three tier high speed bus. Like Davis, Gupta also fails to disclose any translation at the application level, and certainly fails to teach or discuss any application control data translation by a "proxy server [that] is a computer interposed between the head end and the plural video-on-demand clients in a multi-tier configuration." Inoue also fails to teach or suggest the recite arrangement.

Thus, any proposed combination of Chawla, Davis, Inoue, and Gupta simply fails to teach or suggest the arrangement of claim 1. For at least this reason, amended claim 1 is allowable. Such action is respectfully requested.

Claims 2, 3 and 4

Claims 2, 3 and 4 depend from claim 1. Since they depend from claim 1, they should be allowed for at least the reasons stated for claim 1. In view of the foregoing discussion of claim 1, the merits of the separate patentability of dependent claims 2, 3, and 4 are not belabored at this time. Claims 2, 3 and 4 should be allowable. Such action is respectfully requested.

Claim 17

For reasons similar to those stated above, a Chawla-Davis combination also fails to teach or suggest a "proxy server comprising a computer interposed between the video server and said plural clients in a multi-tier configuration, and the proxy server translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible components into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications." For at least this reason, amended claim 17 is allowable. Such action is respectfully requested.

Claim 18

Claim 18 depends from claim 17, and should be allowed for at least the reasons stated for claim 17. In view of the foregoing discussion of claim 17, the merits of the separate patentability of dependent claim 18 is not belabored at this time. Claim 18 should be allowable. Such action is respectfully requested.

Independent Claims 31 and 33

Applicants respectfully submit that for reasons similar to those stated above, the combinations proposed by the Office fail to teach or suggest the following features:

Claim 31 -- "the method is performed by a proxy server comprising a computer interposed between the first and second clients and the head-end and wherein the proxy server translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not the first video-on-demand application and the sent and received application control data comprising the first and second video-on-demand application is transmitted according to a same network communication protocol."

Class 33 -- "a proxy server comprising a computer interposed between the at least one client and the at least one server, the proxy server translating between clients and servers communicating according to incompatible video on demand applications."

Since Chawla fails to teach or suggest these features of independent claims 31 and 33, they should be allowable.

Dependent Claim 34

Claim 34 depends from above allowable independent claim 33. Since claim 34 depends from allowable independent claim 33, it should be allowed for at least this reason. Such action is respectfully requested.

Conclusion

The claims in their present form should now be allowable. If the Examiner does not agree, please refer to Applicant's Formal Request for an Interview. Such action is respectfully requested.

Respectfully submitted,

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